

## CLAIMS:

1. A color picture screen provided with a blue phosphor layer which comprises a first phosphor having a light emission in the range from 430 to 490 nm and a second phosphor having a light emission in the range from 380 to 450 nm.
- 5 2. A color picture screen as claimed in claim 1, characterized in that the second phosphor has a light emission in the range from 380 to 420 nm.
- 10 3. A color picture screen as claimed in claim 1, characterized in that the second phosphor is chosen from the group comprising  $Tb^{3+}$ -activated phosphors,  $Eu^{2+}$ -activated phosphors,  $Bi^{3+}$ -activated phosphors,  $Ga^{3+}$ -activated phosphors, and  $Ce^{3+}$ -activated phosphors.
- 15 4. A color picture screen as claimed in claim 3, characterized in that the second phosphor is chosen from the group comprising  $LaOBr:Tb$ ,  $Y_2O_2S:Tb$ ,  $Y_3Al_5O_{12}:Tb$ ,  $Ca_3(PO_4)_2:Eu$ ,  $Sr_2P_2O_7:Eu$ ,  $(Sr,Mg)_2P_2O_7:Eu$   $CaB_2P_2O_9:Eu$ ,  $CaSO_4:Eu$ ,  $CaO:Bi$ ,  $ZnO:Ga$  and  $(Y,Gd)BO_3:Ce$ .
- 20 5. A color picture screen as claimed in claim 1, characterized in that the phosphor layer comprises a physical mixture of particles of the first phosphor and particles of the second phosphor.
- 25 6. A color picture screen as claimed in claim 5, characterized in that the proportional quantity of the second phosphor in the phosphor layer lies between 5 and 50% by weight in relation to the quantity of the first phosphor.
7. A color picture screen as claimed in claim 1, characterized in that the phosphor layer has a base layer comprising the first phosphor and a covering layer comprising the second phosphor.

8. A color picture screen as claimed in claim 1, characterized in that the first phosphor is chosen from the group comprising ZnS:Ag, BaMgAl<sub>10</sub>O<sub>17</sub>:Eu and (Ba,Sr,Ca)<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>Cl:Eu.

5 9. A color picture screen as claimed in claim 1, characterized in that the color picture screen is chosen from the group comprising cathode ray tubes, plasma picture screens, and liquid crystal picture screens.

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